

DEPARTMENT OF VETERANS AFFAIRS, NATIONAL CEMETERY ADMINISTRATION
Oakland, California

SCHEDULE OF SERVICES:

Contract Line Item	Description	Quantity	Unit	Unit Price	Total Price
001	Remove and replace the sidewalks and the shelter aprons at Committal Shelter C at the Riverside National Cemetery located in Riverside, CA	1	Job	\$_____	\$_____

SCOPE OF WORK

Project Title: Riverside National Cemetery Shelter C Sidewalk Replacement

GENERAL SCOPE OF WORK:

The Contractor shall furnish all labor, materials, equipment services to perform construction work to demolish, remove and replace the sidewalks at Committal Shelter C. Sidewalks shall follow the original location orientation including all ADA design features but with the added features of extending the concrete aprons around the shelter pad and eliminating the steps to the shelter pad.

Unless otherwise noted, all materials shall be new. Prior to installation, Contractor shall submit for approval the manufacturer's literature and specifications on the all material being installed.

All work will be coordinated with the Contracting Officer's Representative (COR). Work will be conducted in such a manner to minimize the impact on the Cemetery operations.

Site work will be accomplished between the hours of 8:00 and 4:30, Monday through Friday, except Federal Holidays.

All work will be coordinated with the Contracting Officer's Representative (COR) and with the Cemetery Director. Only the Contracting Officer (CO) has the authority to make changes to the contract that affects price and/or time.

Contracting Officer's Representative (COR):
Mike Cummings

RNC Shelter C Sidewalk Replacement

Facility Maintenance Supervisor
Riverside National Cemetery
22495 Van Buren Boulevard
Riverside, CA 92518
TEL: (951) 653-8417 x 811
FAX: (951) 653-5233
Michael.Cummings1@va.gov

Cemetery Director:
Dean Moline
TEL: (951) 653-8417

The work in this project includes but not limited to:

Item 1: Shelter C Sidewalk Replacement

- a) **Demolition:** All underground service shall be located using the Riverside National Cemetery as-builds and marked prior to demolition. All material will be removed and disposed of by the Contractor. Demolition shall include the existing concrete walkway from the **identified curb elevation point near** the roadway to and including the sloped ramps of concrete at the front and back of the shelter pad that lead to the top of the committal shelter exposed aggregate concrete pad **and the irregular strips along the east and south sides of the shelter pad to square the pads shape.**
- b) **Subgrade in areas where tree roots are found:** Prepared smooth subgrade of uniform density. Large embedded objects such as boulders, rock greater than 1 inch and tree roots found in the subgrade shall be removed to a minimum depth of six (6) inches below the finished subgrade elevation and the space shall be backfilled with suitable material which shall be thoroughly compacted to 95% Standard Proctor density.
- c) **Sub-base:** A layer of Class "2" sub-base material shall be placed on top of the prepared subgrade in a uniform depth of 6 inches and be compacted to 95% Standard Proctor density.
- d) **Concrete:** Concrete used in the construction of sidewalks shall be Class "A" concrete , Portland Cement Concrete, with the additional requirement that the amount of chert in crushed limestone aggregate not exceed two percent (2%) by weight.
- e) **Concrete Reinforcement:** Longitudinal reinforcement shall be #3 rebar with a minimum of 18" lapping. Sidewalk shall be 4 inches in depth with wire mesh placed in the upper portion of the sidewalk, at least 2 in. below the surface. At all contraction joints, only one half the reinforcing wire mesh will span the joint. Nylon synthetic fibers will be added to the mix and have a length of one inch (+/- .25") and will be dosed at two pounds per cubic yard of concrete. **Where concrete is deposited adjacent to an existing slab, slip dowels will be retrofitted into the existing slab for proper load transfer. Sika Anchoring adhesive (or equal) shall be used to secure dowels in the drilled holes.**
- f) **Forms:** The forms shall be of either metal or wood and shall be straight, free from warping, of sufficient strength to resist lateral pressure of the concrete and of a height of 3.5 inches. Forms shall be thoroughly cleaned, securely staked, braced and held to the required line and grade before any concrete is deposited. A form release agent should be applied to ease stripping.
- g) **Depositing Concrete:** The concrete shall be deposited between the forms on moistened sub-base and shall be struck off and compacted to the required thickness 4 inches.

h) **Joints:**

- **Expansion Joints:** Expansion joints consisting of 12mm (1/2 inch) thick compressible material the full depth of the concrete will be placed at 12 meter intervals along the sidewalk and wherever the sidewalk abuts another rigid structure. This includes junctions of sidewalks, curb, buildings or other similar members, as well as where a floor slab joins. Material must be highly resilient, and non-extruding in hot weather, or brittle in cold weather.
- **Contraction Joints (dummy joints):** Contraction joints shall be tooled joints, (Not saw cut) 1 inch in depth at 2 meter intervals. Joints must be perpendicular to the edge and straight. Use of a straight edge, such as a one inch thick board, to serve as a guide is recommended in obtaining a straight-lint joint.
- **Joint Sealant:** At the end of the curing period, expansion joints shall be cleaned and filled with cold-applied joint sealant. Joint sealant shall be gray or stone in color. The joint opening shall be thoroughly cleaned before the sealing material is placed. Sealing material shall not be spilled on exposed surfaces of the concrete. Concrete at the joint shall be surface dry and atmospheric and concrete temperatures shall be above 10 degrees C 50 degrees F at the time of application of joint sealing material. Excess material on exposed surfaces of the concrete shall be removed immediately and concrete surfaces cleaned.

- i) **Finishing:** After the concrete has been brought true to line and grade it shall be finished to match the existing sidewalk concrete at the Riverside National Cemetery Committal Shelter C sidewalk. All edges shall be rounded with an edging tool to one-fourth (1/4) inch radius.
- j) **Curing:** Wet-curing or the application of a liquid membrane-forming curing compound is needed to ensure there is adequate moisture in the concrete while its strength is developing. Curing shall be initiated immediately after finishing. Concrete shall be protected against loss of moisture and rapid temperature changes for at least 7 days from the beginning of the curing operation.
- l) **Backfilling:** After the concrete has sufficiently set, the forms shall be removed and any space on side of walks shall be backfilled with suitable material. Areas shall be compacted and graded to blend in with the surrounding grade. Areas where turf was removed or damaged will be replaced with turf type tall fescue sod.
- m) **Concrete Sealant:** At the end of the curing period, (2) two coats of an industry standard sealant shall be applied. Sealant shall be a Non-toxic, Non-hazardous and Non-flammable, water-based, fast drying, and penetrating concrete sealer. Sealant shall not contain any VOC's (Volatile Organic Compounds) or Solvents. Application of material shall be in accordance with the manufacturer's instructions. Coated surfaces shall be protected from vehicular and pedestrian traffic until dry.
- n) **Contractor Damage:** Any subsequent damage by the contractor to existing curbs, buildings or other similar members shall be repaired at the contractor's expense. No patching of any contractor caused cracks or chips to curbs will be acceptable. The section of curb between contraction joints shall be replaced in full. Buildings, retaining walls or other members shall be repaired to original specifications found in the cemetery as-builds.

Item 2: Landscape Modifications

- a) A new continuous constant sloping grade sidewalk from curb elevation to the existing committal shelter concrete slab will elevate the new sidewalk above the exiting grade and turfed areas.
- b) Contractor shall remove the turf from the entire edge of the new sidewalk, install new compacted topsoil to meet the height of the new the sidewalk and install new turf on the newly landscaped areas. Soil height and type, turf type and height shall be approved by the COR prior to installation. All grade transitions between the new and old turf areas shall be smooth and seamless. **To ensure soil compatibility, contractor is allowed to use soil from existing cemetery stockpile identified by the COR.**
- c) Contractor is responsible for all modification to the existing irrigation system in this area including relocating and raising sprinkler heads; raising, relocating, and replacing irrigation valves, lines and boxes; etc. **New irrigation valves shall be remove and replaced with GRISWOLD 2" 2230 NE ANGLE EPOXY electric control valves with low watt solenoid.**

- d) **Areas identified by the COR that have dead turf along the existing concrete slab of the committal shelter shall have the dead turf removed, soil removed, underlayment of weed cloth installed and rock mulch installed to a depth of 3 inches. Mulched areas shall be contained with a 6" flat, continuous flow concrete curb border. Coordinate with the COR for exact dimensions of the mulched area and type of mulch.**
- e) **Approximately 16 sq. ft. of the shelter slab at the Northeast corner shall be saw-cut, removed and replaced to relocate existing electrical conduit. New concrete shall match existing.**
- f) **Contractor shall add a small 8 sq. ft. section of walkway to the southern tip of apron where the shelter sidewalk meets the curb. New concrete shall butt existing walkway and drain.**

GENERAL REQUIREMENT

I. General Notes

1. Prior to submission of any bid, the Contractor shall perform a thorough field survey of the existing site conditions and features. Verify at project site the exact size, electrical requirements, clearances of all existing services being relocated, extended, connected to or removed. Any site conditions which may cause significant deviation from the site plan shall be brought to the attention of the Contracting Officer or his/her Representative (COR) for clarification prior to submission of the bid. Verify dimensions of all owner furnished and installed equipment to insure proper coordination with construction. Contractor shall bear all costs for relocation of existing utilities from failure to advise of conflict in writing prior to submission of any bid, and/or from failure to properly coordinate installations of system.
2. All utilities required for the continuous operation of all existing facilities must be maintained in service at all times except as required for new system connection.
3. Coordinate and resolve all details of the shutdown for the specific utilities to be shut down, then submit to the COR for acceptance a request, 2 weeks in advance of proposed shutdown. When option exists, implement options to minimize interruption of service to the facilities.
4. Contractor shall coordinate with the COR to locate the temporary portable potties, material storage containers, temporary construction fencing, etc. as required for completion of the project. Public access to the National Cemetery shall not be impaired.
5. The Contractor shall assume sole responsibility for safety of all persons on or about the construction site, in accordance with applicable laws and codes. Guard all hazards in accordance with the safety provisions of the latest manual of accident prevention published by the Associated General Contractors of America and OSHA. Fence the construction area as necessary to prevent public access to the work site.
6. The Contractor shall guarantee that all work done under this contract will be free from faulty materials or workmanship and hereby agrees to repair or replace without cost to the VA and to his/her satisfaction all defects or imperfection appearing in said work within a period of one year after the date of final acceptance by the VA of all work done under this contract.
7. Matters related to safety, and any actions of the Contractor, shall meet all safety requirements of Riverside National Cemetery Safety Officer, Department of Veterans Affairs, OSHA, and the State. It is incumbent upon the Contractor to be familiar with these requirements. "Safety" shall also include the Contractor having a safety representative who maintains regular and routine contact with the Safety Officer at RNC. Contractor shall provide training of the contractor's and subcontractor's workers as necessary to meet these requirements.
8. Repair and replace any existing structure to existing condition when altered or damaged by the construction.
9. Completion Time: Forty-five (45) calendar days from date of issuance of Notice to Proceed (NTP).

---END---